UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,860	10/29/2003	Kenneth A. Thomas	84820-4402 ADB	5712

530 7590 10/10/2006

LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090

EXAMINER	
JOLLEY, KIRSTEN	
ART UNIT	PAPER NUMBER
1762	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/694,860	THOMAS, KENNETH A.	
	Examiner	Art Unit	
	Kirsten C. Jolley	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10 and 12-23* is/are pending in the application.

4a) Of the above claim(s) *12-23* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 18, 2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miekka et al. (US 6,540,865) in view of Xie et al. (US 6,503,620) and Ugolick et al. (US 5,993,961), or further taken in view of Piacente et al. (US 5,178,912).

Miekka et al. discloses a method for forming a tape comprising: providing a base material having a first surface and a second surface; applying a first layer of a laminating pressure-sensitive adhesive (PSA layer) to cover the first surface of the base material; drying the PSA layer to provide a dry layer; applying a second layer of a melted hot melt adhesive (detackified layer, or DL) on top of the first layer; cooling the second layer to form a solidified

layer of hot melt adhesive; forming the tape into a tape width by cutting; and winding the tape into a roll (col. 7, lines 50-57; col. 8, lines 49-51; col. 10, lines 5-7; col. 11, lines 43-62). Miekka et al. also teaches "it may be desirable to tint the DL to avoid having to use a tinted second substrate, or to avoid having to tint the PSA layer as the use of tint in the PSA layer may adversely affect its adhesive properties" (col. 32, lines 34-37). The Examiner notes that while Miekka et al. teaches away from the use of tint, or coloring agent, in the first PSA layer, the reference none-the-less teaches that it is known to use coloring agent in the PSA layer. Alternatively, it would have been obvious for one having ordinary skill in the art to have provided coloring agent in the PSA layer upon seeing the teachings of Miekka et al. with the expected loss of adhesive properties of the PSA layer.

Miekka et al. teaches that the substrate may be in the form of any material suitable to act as a carrier for the construction, and preferred substrates include flexible materials that are sheet stock or roll or web stock (col. 7, lines 28-32). Miekka et al. lacks a specific teaching of applying its adhesive to a polymeric film. Xie et al. is cited for its similar teachings of a facestock material provided with two adhesive layers thereon to form a multilayer PSA construction. Xie et al. provides a list of exemplary facestock materials that are suitable flexible materials to form a construction with adhesives applied thereon, including a number of polymeric materials (col. 13, lines 20-43). It would have been obvious for one having ordinary skill in the art, having seen the references of Miekka et al. and Xie et al. in combination, to have used a polymeric material as the base substrate in the method of Miekka et al. with the expectation of successful results since Miekka et al. generally discloses use of conventional flexible materials and is not limiting.

As to the new limitation of "applying a release coating to the second surface of the base film," the Examiner acknowledges that Miekka et al. does not teach the use of a release coating on the second surface of its base film. However Miekka et al. teaches in col. 8, lines 26-32, "Adhesive interference or blocking between the DL and an adjacent backside surface of the release liner is not desired because it results in the release liner being pulled away from the PSA layer during the removal or separation operation, thereby rendering the prelaminate PSA construction useless." The Examiner notes that it is a well known step in the adhesive laminate/tape manufacturing art to apply a release coating to the bottom surface of a base film to avoid sticking on itself when the product is wound and unwound. Ugolick et al. teaches in its discussion of conventional PSA constructions: "the release surface may be provided ... on the backside of the facestock 12 in an application where the construction is intended to be rolled upon itself such as to produce an adhesive tape" (col. 3, lines 6-10). It is the Examiner's position that it would have been obvious for one having ordinary skill in the art to have applied a release coating to the second surface of the base film upon seeing the teaching in Miekka et al. that adhesion between the DL and an adjacent backside surface of the release liner is undesirable, and since it is well known to apply a release coating to the second surface of a film when rolling as taught by Ugolick et al. Further, one would expect successful results because both references are similarly directed to the manufacture of adhesive laminate constructions.

As to the limitation requiring "using a mixer to mix a laminating adhesive with a colouring agent to form a mixture; and transferring the mixture directly from the mixer to a roller and simultaneously suing the roller to apply the mixture to the first surface of the base film so as to form a first layer covering the first surface of the base film", the Examiner notes that Miekka

et al. teaches that its laminating adhesive layer may be applied by a roller coating in col. 9, lines 35-37. While Miekka et al. lacks a teaching of mixing the coloring agent with its PSA material in a mixer, it would have been well within the skill of an ordinary artisan to have used a mixer to mix the coloring agent and PSA material prior to application in order to ensure that the PSA layer that is applied is homogeneously colored. Further, Miekka et al. lacks a specific teaching of transferring the mixture directly from the mixer to a roller and simultaneously using the roller to apply the mixture. However, the Examiner notes that it is well known in the art to simultaneously transfer a coating material directly from a mixer to the application device (such as a roller applicator) in a web coating process in order for the process to run continuously on the indefinite web substrate, thus running efficiently and effectively and not being periodically stopped as in batch operations. Alternatively, Piacente et al. is cited for its teaching of mixing colored decorative particles 13 and a resin 14 in a mixer 15, and then transferring the mixture to a roller applicator while simultaneously coating a web substrate (see Figure 1). It would have been obvious for one having ordinary skill in the art to have simultaneously transferred a colored PSA mixture from a mixer to a roller applicator in the process of Miekka et al., particularly upon seeing the prior art of Piacente et al., with the expectation of improved efficiency and maintaining a continuous web coating process.

With respect to claim 2, Miekka et al. teaches that the laminate construction may be split lengthwise to form two or more different rolls (col. 8, lines 49-54). It would have been obvious to have wound the tapes into individual supply packages in order to sell them commercially.

As to claim 3, Xie et al. teaches that the polymeric base film may be polyethylene terephthalate in col. 15, lines 41-47.

As to claims 4-5 and 7, Miekka et al. teaches that its construction is then laminated to a second substrate which may be paper (col. 20, lines 21-26 and col. 21). It is the Examiner's position that the shape and end use of Miekka et al.'s construction is a matter of design choice that would be determined by one having ordinary skill in the art.

As to claim 6, Miekka et al. is silent with regard to the thickness of the base film. It would have been obvious for one having ordinary skill in the art to have determined the optimum base film thickness through routine experimentation depending upon the desired end use of the product, in the absence of a showing of criticality.

As to claim 8, Miekka et al. teaches that the first adhesive (PSA) layer may be applied as a liquid including solvent (col. 11, lines 53-62).

As to claim 10, Miekka et al. teaches bonding the hot melt adhesive to a second substrate by heating the adhesive in col. 21, lines 10-18.

As to claim 11, Miekka et al. teaches that the base film preferably has a release material thereon (col. 7, lines 33-35), and the hot melt (DL) adhesive layer may be pressure-sensitive (col. 8, lines 55-58).

Response to Arguments

4. Applicant's arguments filed September 18, 2006 have been considered. The Examiner acknowledges that Miekka et al. does not disclose the application of a release layer to a second surface of the base film. However, it is the Examiner's position that this is a well known process step in the manufacture of adhesive laminate constructions that are wound to prevent sticking to themselves. This process step is demonstrated by the previously-cited art of Ugolick et al. It

would have been obvious to have incorporated the claimed release layer application step in the process of Miekka et al. for the reasons discussed in detail above. Accordingly the claims remain rejected as discussed above.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kirsten C Jolley
Primary Examiner
Art Unit 1762

kcj